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# UNITED STATES DEPARTMENT OF AGRICULTURE

Agriculture Handbook No. 3

Washington, D. C.

April 1950

# WORKERS IN SUBJECTS PERTAINING TO AGRICULTURE IN LAND-GRANT COLLEGES AND EXPERIMENT STATIONS



For earlier, see m.P. no. 677

AGRICULTURAL RESEARCH ADMINISTRATION OFFICE OF EXPERIMENT STATIONS

#### TITLES AND SERIES OF PUBLICATIONS SINCE THE FIRST ISSUE IN 1889

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Organization of the Agricultural Experiment Stations in the United States. 1889. (Published as U. S. Dept. Agr., Off. Expt. Stas. Bul. 1.)
Organization Lists of the Agricultural Experiment Stations, and Agricultural Schools and Colleges in the United States. 1890. (U. S. Dept. Agr., Off. Expt. Stas. Bul. 5.)
Organization Lists of the Agricultural Experiment Stations in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. Colleges in the United States. 1891. (U. S. Dept. Agr., Off. Expt. Stas. College
 Organization Lists of the Agricultural Experiment Stations in the United States. 1891. (C. S. 1892, 1893, Off. Expt. Stas. Circ. 20.)
Organization Lists of the Agricultural Experiment Stations and Agricultural Schools and Colleges. 1892, 1893, 1894. (U. S. Dept. Agr., Off. Expt. Stas. Buls. 12, 13, 19.)
Organization Lists of the Agricultural Experiment Stations and Institutions with Courses in Agriculture in the United States. 1895, 1896, 1897, 1898. (U. S. Dept. Agr., Off. Expt. Stas. Buls. 23, 27, 39, 47.)
Organization Lists of the Agricultural Colleges and Experiment Stations in the United States, with a List of Agricultural Experiment Stations in Foreign Countries. 1899, 1900, 1901, 1902. (U. S. Dept. Agr., Off. Expt. Stac. Rule. 50, 74, 82, 111.)
 Stas. Buls. 59, 74, 88, 111.)
Organization Lists of the Agricultural Colleges and Experiment Stations in the United States. 1903 to 1912, inclusive. (U. S. Dept. Agr., Off. Expt. Stas. Buls. 122, 137, 151, 161, 176, 197, 206, 224, 233, 247, 253.)
Superseded by Lists of Workers in Subjects Pertaining to Agriculture and Home Economics in the U. S. Depart-
 ment of Agriculture and the State Agricultural Colleges and Experiment Stations. (Unnumbered series running
through 1921-22.)
1914. The 1913 edition corrected to June 1914.
                      1914.
1915.
        1915. Corrected to August 1, 1915.

1916. None published—corrections brought to January 1917.

List of Workers in Subjects Pertaining to Agriculture and Home Economics. Part 1. United States Depart-
 ment of Agriculture.
                                                                                 Part 2. State Agricultural Colleges and Experiment Stations.
                      1918-19
                                                        ["Marketing" added to title for this issue only.]
Not published.
                      1919-20.
                       1920-21.
                       1921-22.
1921-22.
1922-23. Issued as Misc. Circ. 4 (pt. 1 not published).
1923-24. Issued as Misc. Circ. 17 (pt. 1 not published).
Title changed to "List of Workers in Subjects Pertaining to Agriculture in State Agricultural Colleges and Experiment Stations," 1924-25. Misc. Circ. 34.
Workers in Subjects Pertaining to Agriculture in State Agricultural Colleges and Experiment Stations.
1925-26. Misc. Circ. 58,
1926-27. Misc. Circ. 87,
1927-28. Misc. Pub. 12,
1928-29. Misc. Pub. 43,
1929-30. Misc. Pub. 67
                      1929-30.
                                                        Misc. Pub. 67.
Misc. Pub. 100.
Misc. Pub. 134.
                     1930-31.
                     1931-32.
                     1932-33.
                                                        Misc. Pub. 154.
                     1933-34
                                                        Misc. Pub 180,
                      1934-35,
                                                        Mise. Pub. 214.
Mise. Pub. 234.
                     1935-36.
        Workers in Subjects Pertaining to Agriculture in Land-Grant Colleges and Experiment Stations.
                     1936-37.
                                                        Misc. Pub. 254.
                                                        Misc. Pub. 299.
Misc. Pub. 335.
Misc. Pub. 378.
                      1937-38.
                     1938-39.
                      1939-40.
                                                       Mise. Pub. 420.
Mise. Pub. 480.
                     1940-41.
                     1941-42.
                     1942-43.
                                                        Mise. Pub. 510.
                                                        Mise. Pub. 535.
Mise. Pub. 556.
                     1943-44
                      1944-45.
                     1945-46.
                                                         Misc. Pub. 603.
                                                        Mise. Pub. 625.
Mise. Pub. 649.
Mise. Pub. 677.
                     1946-47
                     1947-48
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1948-49.

1949-50. Agriculture Handbook No. 3.

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1949-50

By BETTY T. RICHARDSON
Office of Experiment Stations



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WASHINGTON: 1950

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<sup>&</sup>lt;sup>1</sup>The entire Executive Committee has been designated as a committee to confer with the Secretary of Agriculture at least annually in furtherance of the recommendations of the Report of the Joint Committee on Extension.

<sup>&</sup>lt;sup>2</sup> President R. F. Poole of South Carolina will represent the Executive Committee on the Board of Directors of the National 4–H Club Foundation.

<sup>\*</sup> Representative in Association Senate.

<sup>‡</sup> Committees thus designated are instructed to work with similar committees of the National Association of State Universities.

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See footnotes \* and ‡ on p. III.

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#### (Not an official committee of the Association)

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See footnote \* on p. III.

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See footnote \* on p. III.



#### KEY TO ABBREVIATIONS

Insts., Institutes.
Invest., Investigations, Investigational, Investigations Acct., Accountant, Accounts. Acct., Accountain, Actg., Acting. Actg., Acting.
Admin., Administration, Administrative.
Agr., Agriculture, Agriculturist, Agricultural.
Agron., Agronomy, Agronomist. tigator. Irrig., Irrigation, Irrigationist. Lab., Laboratory. Agron, Agreditute, Agreditation, Agronomist.
Agron, Agent.
An., Animal.
Anal., Analytical, Analysis.
Anat., Anatomy.
Arch., Architect, Architecture, Architectural. Assoc., Associate, Association. Asst., Assistant. Asst., Assistant.
Bact., Bacteriology, Bacteriologist.
Biochem., Biochemist, Biochemistry, Biochemniocnem., Biocnemistry, Biocnemistry, Biocnem ical.
Biol., Biology, Biologist, Biological.
Bidg., Building(s).
Bot., Botany, Botanist, Botanical.
Brdg., Breeding.
Bull., Bulletin.
Chair., Chairman.
Chem., Chemistry, Chemist, Chemical.
Climat., Climatology, Climatologist.
Coll., College.
Collab., Collaborator, Collaborating.
Comp., Comparative.
Comp., Commissioner.
Conserv., Conservation, Conservationist.
Coop., Cooperation, Cooperative, Cooperator.
Coresp., Correspondence, Correspondent.
Dem., Demonstration, Demonstrator.
Dept., Department. Dept., Departm Dir., Director. Dist., District. Div., Division. Department. Div., Division.

Dom., Domestic.

Ecol., Ecology, Ecologist, Ecological.

Econ., Economy, Economic(s), Economist.

Ed., Education, Educational.

Engin., Engineer, Engineering.

Ent., Entomology, Entomologist, Entomological. Equip., Equipment. Erad., Eradication. Exec., Executive. Experimental, Experi-Expt., Experiment, mentalist. Ext., Extension.
Fert., Fertility, Fertilizer.
Flor., Floriculture, Floriculturist, Floricultural. For., Forestry, Forester. Gard., Gardening, Gardener. Gen., General. Geog., Geleganby.
Geog., Geology, Geologist, Geological.
Grad., Graduate.
Histol., Histology, Histologist.
Hon., Honorary.
Horticulture, Horticulturist, Horticultural. tural. Husb., Husbandry, Husbandman. Hyg., Hygiene. Illus., Illustration, Illustrative. Indus., Industry, Industrial, Industries. Inorg., Inorganic. Insp., Inspection, Inspector. Instr., Instructor, Instruction.

tigator.
Irrig., Irrigation, Irrigationist.
Lab., Laboratory.
Landsc., Landscape.
Lect., Lecturer.
Libr., Library, Librarian.
Mach., Machine, Machinery.
Mech., Medical.
Med., Medicine, Medical.
Met., Meteorology, Meteorologist.
Mfg., Manufacturing.
Mfr., Manufacturing.
Mfr., Manager.
Mgt., Management.
Microbiol., Microbiology, Microbiologist.
Mkty., Marketing.
Morphol., Morphology, Morphologist.
Mytology, Mycologist.
Nutr., Nutrition, Nutritionist.
Oter., Olericulture, Olericulturist.
Org., Organic.
Organ., Organization (s).
Ornith., Ornithology, Parasitologist.
Patas., Parasitology, Pathologist.
Path., Pathology, Pathologist, Pathological.
Pharm., Pharmacy, Pharmacist, Pharnceutical. Pharma-Pharmacol., Pharmacology, Pharmacologist.
Photog., Photography, Photographer.
Physics, Physical.
Physiol., Physiology, Physiologist, Physiological. Phytopath., Phytopathology, Phytopathologist, Phytopathological. Phytopathological.

P. O., Post Office.

Pomol., Pomology, Pomologist, Pomological.

Pract., Practice, Practical.

Prep., Preparatory.

Pres., President.

Prin., Principal.

Pred., Preduction Prin., Principal.
Prod., Production.
Prod., Professor.
Pubs. Publications.
Res., Research.
Sci., Science, Scientist, Scientific.
Sect., Section.
Secon., Secondary.
Secoy., Secretary.
Sociol., Sociology, Sociologist.
Spec., Special, Specialist.
Station. Spec., Special, Specialist.
Sta., Station.
Stat., Statistics, Statistical, Statistician. Subsect., Substation.
Substa., Substation.
Supt., Superintendent.
Supvr., Supervisor.
Surg., Surgery.
Tech., Technical, Technician.
Technol., Technology, Technologist.
Treas., Treasurer. Subsect., Subsection. Substation. Technot., Technology, Treasurer.
Treas., Treasurer.
Trop., Tropical.
Univ., University.
Veg., Vegetable, Vegetation.
Vet., Veterinary, Veterinarian.
Vit., Viticulture, Viticulturist, Viticultural.
Voc., Vocational. Voc., Vocational. Zool., Zoology, Zoologist, Zoological.

#### **PREFACE**

The following explanations apply throughout the publication: Subject-matter workers in extension are generally shown under the respective department or division of the college.

Certain institutions use the academic title for experiment station workers as well as for personnel engaged solely as teachers.

The figure 1 immediately following the name of a worker indicates leave of absence.

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Farm Crops—Continued

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†Bsther Nagoiski, D. S., Index. (1993), 2001.
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‡Doris Leggitt, B. S., Dist. Agt. (P. O., Amarillo).

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Angelo). †Mrs. Grace M. Martin, Dist. Agt. (P. O., Ft.

\*\*Tred Martin, B. S., Dist. Agt. (P. 0., Ft. Stockton).

†Tred Martin, B. S., Dist. Agt.
†R. S. Miller, B. S., Dist. Agt. (P. 0. Uvalde).

†S. L. Neal, B. S., Dist. Agt.
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\$Mae B. Smith, B. S., Dist. Agt. (P. O., Uvalde).

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J. H. Surovik, B. S., Dist. Agt.

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‡A. H. Karcher, Jr., B. S., Asst. State 4-H Club Leader.

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†W. T. Nettles, Feed Insp.

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Spec.

Spec.

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†Mary A. Grimes, M. S., Textiles and Clothing Spec.
†Jimmie N. Harris, M. S., Assoc. Foods and Nutr. Spec.
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†Margaret J. Jackson, B. S., Foods and Nutr. Spec.

Spec. ‡Eloise T. Johnson, M. A., Family Life Ed. Spec.

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Spec

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†E. W. Hooker, Chief Clerk.
†V. E. Schember, M. S., Ewec. Asst.
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R. C. Reeder, Agt. (SCS).
N. P. Swanson, B. S., Irrig. Engin.
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C. E. Van Doren, B. S., Soil Conserv.
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Angleton (No. 3)—
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W. F. Turner, B. S., Supt.
G. E. Cauthen, D. V. M., M. S., Assoc.
Vet.
M. E. Riewe, B. S., Junior Agron.
L. L. Wade, B. S., Junior Parasit. (Coop.
U. S. D. A.).
Balmorhea (No. 9)—
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Beaumont (No. 4—Rice Expt. Sta.)—
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D. A.).
Fred Allred, B. S., Agr. Engin. (Coop.
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H. M. Beachell, M. S., Agron. (Coop.
U. S. D. A.).
E. C. Tullis, Ph. D., Plant Path. (Coop.
U. S. D. A.).
R. M. Weihing, Ph. D., Agron. (Coop.
U. S. D. A.).
R. M. Weihing, Ph. D., Agron.
Beville (No. 1)—
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Lucas Reyes, Junior Agron.
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Chillicothe (No. 12)—
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D. A.).
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Franklin (Tomato Invest. Lab., Robertson

Co.)

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Gilmer (Sweet Potato Invest.)—

Ralph Michael, B. S., Assoc. Hort. in charge.

Gonzales (No. 21)—
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Iowa Park (No. 16)—
L. E. Brooks, B. S., Supt.
V. I. Woodfin, B. S., Junior Hort.

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E. D. Cook, M. S., Supt.
L. E. Crane, B. S., Junior Agron.
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Husb. Sonora (No. 14)—
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O. L. Carpenter, Jr., An. Husb.
W. T. Hardy, D. V. M., Vet.
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Substations-Continued

Engin

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J. S. Morris, M. S., Asst. Agron.
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F. A. Frank, Ph. D., Hort.
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Mutr.

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‡Carl Frischknecht, Ph. D., Dir. of Ext. Service.

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Stas.

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- Veterinary Science—Continued

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